Developing the Hydrological Problématique of Taboga Island

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Problems of Taboga
The issue of water scarcity on Taboga is a fairly complex issue with multiple barriers to overcome. The island is a hub for tourism, but it lacks the resources to sustain much development. There are several wells on the island as well as a desalination plant, but the wells house a diminishing water supply and the desalination plant is inoperative.

Research
In the absence of a great deal of scientific data, we opted to try and develop an understanding of the social aspect of water scarcity as it exists on Taboga. Through careful investigation of both the physical and social aspects of Taboga, as well as examination of other case studies involving similar islands and water scarcity, we came up with a clear understanding of the greater problem of water scarcity as well as develop feasible solutions to the issue.

Results
Taboga has a limited water supply due to limited rainfall, overdrawing of groundwater, and a broken desalination plant. Matters are further complicated by misconceptions about the available water supply as well as the nature of the water problem. Through interviews, we were able to gain a more complete understanding of local perspectives on water scarcity issues. Through researching case studies of other similar islands, we were able to verify the feasibility of developing methods of desalination and rainwater harvesting to cope with water scarcity.

Solutions
To remedy the problem, we propose a four step plan of education, policy development, rainwater harvesting, and water quality monitoring. Of these four recommendations, policy development in the form of taxation is the most important. With the capital gained from the taxation of tourism, the island of Taboga can begin to improve education, infrastructure, and water quality monitoring.

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